

AKAI
professional *Logemann*

MIDI PRODUCTION CENTER

MPC60



■
**INTEGRATED
MIDI SEQUENCER
AND
DRUM SAMPLER**

A GLIMMER OF LIGHT OVER THE HORIZON MARKS THE BEGINNING OF A NEW ERA IN CREATIVE MUSIC PRODUCTION TECHNOLOGY

A POWERFUL COMPOSITION AND PRODUCTION CENTER FEATURING AN EXTENSIVE MIDI SEQUENCER/DRUM SAMPLER DESIGNED FOR SIMPLE AND EASY OPERATION

Today, with the tremendous proliferation of MIDI sequencers, samplers, and digital drum machines, trying to learn all of these numerous complex devices and attempting to interface them together can be a frustrating task. In response, an entirely new integrated system concept has evolved through the pioneering efforts of Roger Linn and AKAI Professional to answer the needs of today's professional musician. The MPC60 MIDI Production Center combines the features of an extensive MIDI sequencer, a professional quality digital drum sampler, and an elegantly intuitive design to create an extraordinarily powerful music production tool that will change the direction of music.

The real power of the MPC60 emerges when used as the control center or the "brain" of a MIDI recording studio. The large random access memory of the MPC60 lets you perform tapeless operation during most production phases by playing either the internal drum samples or by driving external MIDI sound modules. Implementation of SMPTE, MIDI Song Position Pointer, and MIDI Time Code allow swift location to any point in a sequence for instantaneous punch-ins or overdubs. The integrated system design allows the internal MIDI sequencer, digital drum sampler, and an external multitrack to all function smoothly together as one incredibly powerful music tool. With its SMPTE trigger capability, and its very high quality sampling, the MPC60 also has extensive applications in video and film post production work.

***AN IMPRESSIVE GRAPHIC DISPLAY, ON-LINE "HELP",
AND A MINIMUM NUMBER OF BUTTON PRESSES MAKE
THE MPC60 EASY TO UNDERSTAND AND OPERATE***

The MPC60 features a large 320 character graphic LCD display screen (8 lines \times 40 characters) for easy programming and editing. The LCD also displays an innovative graphic representation of the programmable audio drum mixer levels and pan settings which may be easily adjusted using the large multi-function rotary dial. In addition, an on-line "help" function will assist you at any point to explain any programming operation you don't understand. All instructions are in plain, clear English so you won't have to keep your head buried in a manual figuring out sub code charts and cryptic symbols. Operation is both intuitive and interactive. The MPC60 represents an advanced technology that has been perfected, refined, and designed so that the most frequently used functions can be accessed with a minimum number of button presses. All sounds and sequences are stored on reliable 3.5" disks with the built-in disk drive. Drums, percussion, sound effects, and sequences can be uploaded fast and easily at any time giving you access to a vast library of sounds.

***A DIGITAL SAMPLING DRUM MACHINE WITH A 40 KHZ
SAMPLING RATE AND AN 18 KHZ BANDWIDTH FOR
ABSOLUTELY STUNNING AUDIO FIDELITY***

The MPC60 reproduces drums with startling dynamic clarity, full frequency response, and low noise due to its proprietary sample encoding method. Cymbals shimmer with a brilliance that is incredibly realistic. And sampling noise is nearly silent—even on low frequency drums such as toms and bass. The MPC60 features 16 velocity and pressure sensitive front panel drum pads and a long 13.1 seconds of sampling time which is expandable to 26.2 seconds at the full 18 kHz bandwidth with the memory expansion board EXM003. Individual drums may be tuned over a wide 1-1/2 octave range. Making your own drum samples is very easy since all samples are recorded with a 40 kHz sampling rate and have an 18 kHz bandwidth to assure that all sounds will be of the highest quality. A special "pre-record" feature automatically

eliminates truncated sample attacks giving you the widest possible dynamic range on each sampled sound. The stunningly realistic sounds of the MPC60 drum sampler section are the result of several unique features specified by Roger Linn in his effort to bring you the most advanced technology possible. A unique HIHAT DECAY control allows you to select between 3 different hihat samples—closed, medium, and open allowing incredible expressive nuances. Repeated strikes on any of the 16 velocity and pressure sensitive drum pads on the front panel will not cut off the decay of the previous strike, thus playing exactly as would an acoustic instrument. And of course the variable dynamic sensing of the drum pads may be defeated any time you choose. A unique "Fade Out" feature automatically fades a sample down to its precise ending point eliminating abrupt truncations. Now your drum and percussion performances can sound truly natural and musical.

***A 32 CHANNEL PROGRAMMABLE STEREO DRUM MIXER
AND 8 ASSIGNABLE INDIVIDUAL MIX OUTPUTS ALLOW
POWERFUL MIXING AUTOMATION***

The MPC60 can hold up to 32 drums of which 16 may play simultaneously. The drums are held in 2 banks, each containing 16 drums. Any of the 32 drums may be instantly accessed using the front panel bank selection switch. The MPC60 has an enormously useful 32 input stereo programmable drum mixer as well as a 32 input (mono) echo send mixer with a stereo return which can be used with an external digital reverb. Both mixes are shown graphically on the LCD display including a graphic representation of the levels and panning locations in the stereo field. Programmed mix changes are automatically updated and visually represented on the screen allowing powerful automation to be performed, visualized, and easily edited. In addition, there are eight individual mix outputs—each of which may contain any combination of the 32 drums. These mixing capabilities described above provide you with tremendous flexibility that could otherwise be achieved only by using up 32 channels of an expensive automated mixing console.

***THE MPC60'S 99 TRACK, 60,000 NOTE MIDI SEQUENCER
WILL WORK WITH YOU FROM CONCEPTION TO
REALIZATION OF THE MOST COMPLEX ORCHESTRATIONS***

The MPC60's 60,000 note MIDI sequencer will record any real time performance into one of the 99 tracks, using either the velocity sensitive front panel drum pads or any external MIDI keyboard. Each of the 99 sequences has its own 99 tracks. The MPC60's enormously powerful step recording and editing feature allows intricate editing of detailed MIDI events such as pitch, duration, velocity, modulation, program change commands, and many others. Most important though, is how incredibly fast and easy the MPC60 is to operate. You can immediately start recording, playing back, overdubbing, and building up songs, arrangements, compositions, and complex orchestral realizations.

***AUTO LOCATE TO ANY POINT FOR RECORDING
OR EDITING AND INSTANTLY RECALL DRUM MIXES***

During recording you can choose either the RECORD (while erasing) mode or the OVERDUB mode which adds onto existing notes. An invaluable auto location feature gives you instant access to any of three location markers within a sequence. And any drum mix programmed into a sequence at this point will be instantly recalled upon playback allowing you to easily build up and edit drum mixes as you go. A metronome click with adjustable volume and rate can be sent to either the stereo mix outputs or to the independent

metronome output. The MPC60 will perform automatic punch in and punch out at preselected points or you can punch in and out using a footswitch. A pressure sensitive "note repeat" feature allows you to easily record drum rolls and repeated notes. And there are two independent MIDI inputs to let you receive both keyboard and MIDI sync data. Entire compositions may be recorded in a single sequence, or sequences can be chained together to create up to 20 Songs, each containing up to 256 steps.

The MPC60 has all of the capabilities needed to perform intricate editing, letting you go into as much detail as you desire. Changes in time signature, tempo, drum mix, pan, drum tuning, or the echo mix may be programmed in at any point within the sequence. Editing features include insertion and deletion of bars, copy all tracks, copy a single track, and merge two tracks together. Timing correction to any specified note value can either be performed automatically during recording, or afterwards, to give you perfect performances. In both cases, the original note duration is faithfully retained. All sequencer data is easily visualized on the large graphic display and the current position within a sequence is displayed in both bar, beat, and clock numbers as well as SMPTE numbers. And of course the on-line help is available to assist you during any sequencing or editing operation.

***PARALLEL MIDI PROCESSING ASSURES PRECISE TIMING
ACCURACY AND 7 DIFFERENT SYNC MODES ALLOW
PERFECT SYNC WITH ANY DEVICE***

Any of the MPC60's 16 MIDI channels may be assigned to any of the four independent MIDI outputs. Using parallel outputs, rather than forcing all of the MIDI data down one cable, minimizes any possible MIDI delay and assures you of the most precise possible performance. The combination of the MPC60's tempo range of 30 ~ 300 BPM (Beats Per Minute) and its 96 clocks per 1/4 note gives you precise timing resolution in even the most complex music. The MPC60 also has a SHIFT TIME function which allows you to shift tracks forward and backward in time by individual clock beats. This feature allows you to manually compensate for MIDI delays or slow attack instruments to achieve dead-on timing accuracy on each instrument.

The MPC60 has 7 different sync modes including SMPTE, MIDI Time Code, and MIDI clock with Song Position Pointer which allows the MPC60 to swiftly locate any point in a song, lock in sync to an external device, and let you start performing punch ins or overdubs. This time-saving feature will create an astonishing increase in your productivity. The MPC60 can also handle FSK, pulse clocks (96), regular MIDI clock, and 1/4 note clicks. In addition, the SMPTE triggering capability of the MPC60 also allows you to lay in sound effects at precise SMPTE points for video and film post-production work adding an exciting dimension to its already vast capabilities.

***THE MPC60 MIDI PRODUCTION CENTER BRINGS
AMAZING FLEXIBILITY AND VERSATILITY INTO THE
HANDS OF THOSE WHO CAN AFFORD TO USE ONLY
THE ABSOLUTE BEST***

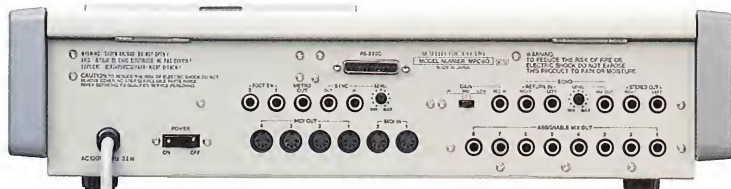
The MPC60 is an incredibly powerful MIDI production tool that has features unparalleled even by those machines priced up in the stratosphere. In addition to its being accessible to every musician and recording studio, the MPC60 lets you operate as fast as your creative musical inspiration will flow. The MPC60's dazzling drum sounds and its immense sequencing power are all contained within one compact, portable unit that is easy to control. That glimmering light over the horizon just might change the way you make music forever.



■MPC60 SPECIFICATIONS

- Display • 320 character LCD display with graphics
- Disk drive • 3.5" 2DD (793k bytes formatted capacity)
- Computer • 80186 (10MHz)
- Dimensions • 495 (W) x 127 (H) x 471 (D) mm
- Weight • 10.5kg
- Power consumed • AC 100V (50/60Hz)/30W, AC 120V (60Hz)/32W, AC 220V (50Hz)/32W, AC 240V (50Hz)/32W
- [Sampler Section]
 - Sampling rate • 40kHz (fixed)
 - Sampling time • 13.1 seconds standard (750k bytes), or 26.2 seconds with sound memory expansion option (EXM003, 750k bytes)
- Frequency response • 20Hz ~ 18kHz
- Data format • 12 bit sample resolution with special non-linear format for reduced noise
- Tuning range • + 1/2 octave, - 1 octave
- Preset sounds • 32 drums
- Voice • 16
- [Sequencer Section]
 - Note • 60,000 (512k bytes)
 - Timing resolution • 96 divisions per 1/4 note
 - Sequences • 99
 - Track per Sequence • 99
 - Output MIDI channels • 16
 - Song mode • 20 songs, 256 steps per song
 - Drum pads • 16 (velocity and pressure sensitive)
 - Sync mode • SMPTE, MIDI time code, MIDI clock, MIDI song position pointer
 - FSK24, Pulse, 1/4 note clicks
- [Rear Panel Inputs/Outputs]
 - Record input • 1 (record input gain switch: HI, MID, LOW)
 - Input level (balanced) HI: -65dBm, Impedance 45k ohms
 - MID: -45dBm, Impedance 45k ohms
 - LOW: -27dBm, Impedance 45k ohms
 - Assignable mix outputs • 8
 - Standard output level 0dBv, Impedance 600 ohms
 - Stereo outputs • 2 (left & right)
 - Standard output level -3dBv, Impedance 600 ohms
 - Echo send mixer output • 1 (output level control x 1)
 - Standard output level -1.5dBv, Impedance 600 ohms
 - Echo return inputs • 2 (left & right)
 - Standard inputs level -3dBv, Impedance 10k ohms
 - Sync input • 1 (dual function—also trigger input, balanced, input level control x 1)
 - Input level 0.5Vp-p ~ 1Vp-p
 - Sync output • 1
 - Output level 1Vp-p, Impedance 220 ohms
 - Metro output • 1 (clicks)
 - MIDI inputs • 2
 - MIDI outputs • 4 (independent)
 - Foot switch inputs • 2
- [Accessories]
 - Standard accessories • 3.5" 2DD x 4 (Drum sound data)
 - Optional accessories • EXM003 Memory Expansion Board
 - SC-X614 Soft case for MPC60

■ For improvement purposes, specifications and design are subject to change without notice.



■ The ASQ10 Digital Sequencer with dedicated front panel controls is also available.

